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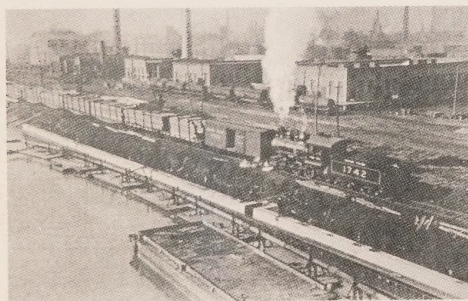
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A PRELIMINARY Historical Land Use Inventory



for the

Lake Ontario Greenway

A Tool for Identifying Potentially
Contaminated Lands



A PRELIMINARY
Historical Land
Use Inventory
for the
**Lake Ontario
Greenway**

A Tool for Identifying Potentially
Contaminated Lands

Prepared for the
Waterfront Regeneration Trust
Beth Benson and Corri-Anne Wood
February 1996

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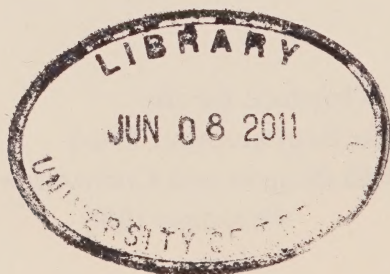
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Commissioner
The Honourable David Crombie, P.C.

Deputy Commissioner
David A. Carter

Commissaire
L'honorable David Crombie, p.c.

Sous-commissaire
David A. Carter

February 1996

Dear Colleague,

I am pleased to provide a copy of *A Preliminary Historical Land Use Inventory for the Lake Ontario Greenway: a Tool for Identifying Potentially Contaminated Lands*.

This preliminary Historical Land Use Inventory (HLUI) was prepared to help municipalities, developers and the residents of Greenway communities begin to understand the historical development of the waterfront, and how past uses are linked to potential for soil and groundwater contamination and related health issues.

The research and listing of sites in this report is preliminary in nature, and not exhaustive in detail. I hope that agencies and municipalities along the Greenway will find this Greenway HLUI a useful starting point for the preparation their own HLUIs. Any comments or questions can be directed to Suzanne Barrett, Director of Environmental Studies at the Waterfront Regeneration Trust.

Thanks, as always, for your continued interest and involvement in our work.

Sincerely,

David Crombie

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CHAPTER



Introduction

An Historical Land Use Inventory (HLUI) consists of locations of past and current land uses that could have caused contamination of structures, soil, groundwater and/or surface water. It can be as simple as a map or as technical as a geographic information system (GIS). Either way, an inventory can be used as a planning tool to “flag” properties where health and safety concerns may need to be assessed early in the redevelopment planning process.

This preliminary Historical Land Use Inventory (HLUI) has been prepared as a contribution to the Lake Ontario Greenway Strategy (LOGS) for the Waterfront Regeneration Trust (WRT). The Greenway extends from Burlington to Trenton along the north shore of Lake Ontario. Many of the municipalities located in the Greenway have experienced a variety of changes in the last century with respect to land use. For example, many properties that were once used for heavy industry have now been vacated and some have been converted to residential, parks or light industrial/commercial uses. Other properties remain underutilized or vacant.

Perspectives and procedures for dealing with industrial waste creation and disposal have changed drastically over the past 20 years. Prior to the 1940s, it was common practice to dispose of industrial wastes on site, resulting in potential contamination of building materials, soil, surface water and groundwater.

The potential contamination of sites is an important public health and environmental issue with respect to the redevelopment of former industrial lands. Many municipalities are beginning to realize the value of creating their own HLUI to help them address this issue. At present, the Cities of Toronto, Niagara Falls and Ottawa have prepared HLUIs. However, the method used to develop these inventories and the criteria for collection of information differ in each case.

This report describes the use of an HLUI as a tool to aid in municipal planning decisions. It provides some guidance in the creation of an inventory, as well as some background information concerning the use of GIS.

The preliminary historical land use inventory for the Lake Ontario Greenway is presented in a map and database format using a geographic information system (GIS). This allows for the various layers of historical and present land use information to be compared and displayed graphically.

1.1 Purpose of the HLUI for LOGS

The purpose of the HLUI for LOGS is to provide an overview of the various historical as well as present land uses along the north shore of Lake Ontario. The HLUI identifies areas that may have potential soil and groundwater contamination concerns. It can be used as a demonstration or a starting point for those municipalities interested in creating their own HLUI.

1.2 Outline

This report is comprised of five major sections:

- ◆ Method – Chapter 2 outlines the step-by-step procedure in the creation of the HLUI, from the planning process to the maintenance of the inventory;
- ◆ HLUI and the Use of GIS – Chapter 3 describes the purpose and advantages of the use of GIS as the presentation format for the HLUI;
- ◆ Sources – An overview of the references and their usefulness is provided in Chapter 4 to present some background on the origin of the historical information;

- ◆ Conclusions – Chapter 5 provides an example of the use of GIS for the LOGS HLUI, and suggestions for how municipalities can use the LOGS HLUI to create their own more detailed HLUIs; and
- ◆ Appendices – Appendices A through I list the various historical databases used in the inventory. A Standard Industrial Classification Code (SIC) list created by the City of Toronto, Environmental Protection Office (EPO) to connect industrial activity to a numerical code is provided in Appendix J.

CHAPTER

2



Method

In 1993, the Ministry of Housing commissioned work by the Canadian Urban Institute and the City of Toronto's Environmental Protection Office (EPO) to assess the feasibility and subsequently to prepare a guide to assist municipalities in creating HLUIs as a means of identifying potential constraints and opportunities in the redevelopment of potentially contaminated lands. The result of this work will be published in early 1996 in the document *A Guide to Creating Historical Land Use Inventories in Potentially Contaminated Sites for Municipalities in Ontario*. The *Guide* is available from the Canadian Urban Institute and from the Waterfront Regeneration Trust.

The method used to prepare the HLUI for LOGS is consistent with the direction provided in the *Guide*. Creation of the HLUI involved five steps:

- ◆ Project Planning
- ◆ Listing Potentially Contaminated Sites
- ◆ Collection of Historical Data
- ◆ Creating a Presentation Format
- ◆ Data Maintenance

2.1 Project Planning

The first step in developing any HLUI is to establish clear objectives and to identify the geographic area of interest.

Objectives

Four objectives were established for the LOGS Historical Land Use Inventory:

1. Assist municipalities in the decision-making processes concerning the redevelopment of potentially contaminated lands;

2. Identify areas within municipalities along the waterfront that may have potential soil and groundwater contamination;
3. Present the HLUI as a general overview of historical and current land uses along the north shore of Lake Ontario using GIS; and
4. Encourage municipalities to initiate the creation of their own more detailed HLUI.

The Study Area

For the purpose of the LOGS HLUI, the study area was defined as the north shore of Lake Ontario extending from Burlington to Trenton. The northern boundary of the study area varies. For the most part, the approximate distance from the shoreline that the inventory covers is 4 kilometres. In smaller communities such as Cobourg, the whole town is included in the study. In larger cities, “waterfront properties” were defined by a northern boundary. For example, in Toronto only those potentially contaminated sites south of Queen Street were identified in this HLUI.

2.2 Identification of Land Use Activities

In the initial stages of preparing the inventory, a list of potentially polluting industries and activities was created based on information contained in the draft document *A Guide to Creating Historical Land Use Inventories of Potentially Contaminated Sites for Municipalities in Ontario* (Canadian Urban Institute, 1996). A more specific list has been created by the City of Toronto’s Environmental Protection Office (EPO) which is accompanied by a Standard Industrial Classification Code (SIC) for each industry. This code summarizes industries into general categories. This list of SIC Codes was used for identifying the various industrial activities and contaminants

associated with industrial operations. More information concerning SIC Codes and the EPO's list is provided in Appendix J.

The initial list of relevant land use activities for the Lake Ontario Greenway developed further as more information was obtained on land uses in specific locations. The list is provided in the inventory.

2.3 Historical Data Collection

The collection of historical information is the most important and most time consuming aspect of preparing the HLUI. Data concerning the present industrial land use and natural areas along the study area were collected and used as the first level of information. Other historical information on industrial land uses, landfill sites, PCB sites and areas of lakefill was added to the base level of information to create a more detailed land use inventory.

The following types of information are included:

- ◆ Historical land use from fire insurance plans
- ◆ Lands currently zoned for industrial use
- ◆ Natural areas
- ◆ Major PCB storage sites
- ◆ Active landfill sites
- ◆ Closed landfill sites
- ◆ Coal gasification plants
- ◆ Coal tar industries
- ◆ Transportation nodes
- ◆ Lake-filled areas

- ◆ Lead reduction zones
- ◆ International Joint Commission areas of concern

Further discussion of these data sources can be found in Chapter 4.

There were two fundamentally different ways in which the data were collected and recorded. Some of the information gathered, such as the landfill sites, came with Universal Transverse Mercator (UTM) coordinates. These UTM coordinates are similar to latitudes and longitudes except they are measured in metres (eastings and northings) as opposed to degrees. Since the end presentation utilizes GIS, the UTM coordinates are all that are needed to pin-point a location. This is a very quick method of locating some of the potentially contaminated sites.

The majority of the project however, was completed by sketching the data directly onto a 1:10,000 Ontario Base Map while keeping an accurate list of what each item on the map represents. This information was then transferred from the paper maps into digital format. This was a longer process since it involved locating addresses of potential sites, comparing road maps to the base maps and in some cases estimating the actual location of a site.

2.4 Presentation

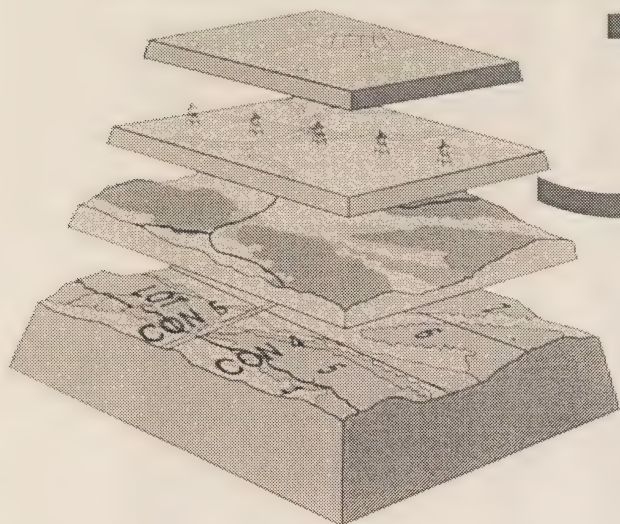
The LOGS land use inventory is presented using a geographic information system (GIS). This is an ideal presentation tool for the inventory since it allows for the combination of a graphic map display of the land uses linked with an information database describing each of the sites. This is explained further in Chapter 3.

2.5 Data Maintenance

Maintenance is an important step to consider in any HLUI. One of the advantages of using a GIS is that it allows users to easily update and change the inventory as new information becomes available, ensuring that the inventory remains current.

CHAPTER

3



Historical Land Use Inventory and the Use of GIS

There are a number of ways in which an historical land use inventory can be recorded:

- ◆ hard copy list;
- ◆ map;
- ◆ database management system; and
- ◆ geographic information system.

The use of a geographic information system (GIS) was chosen to record and display information for the LOGS HLUI because of its versatility and ease in which it can be maintained and updated. It allows links to be made between graphic display and databases so that the HLUI can be easily represented and analyzed. An example of the use of GIS is provided in Section 5.1 using the Oshawa/Whitby Landscape Unit.

3.1 What is a Geographic Information System?

A GIS is a combination of both spatial and descriptive information. Spatial information is represented as a digital map image and descriptive information is provided in the computer database. Simply, spatial refers to location, and descriptive information are the attributes of that location. A GIS uses both the database management system and maps to record and display the data gathered for the HLUI.

3.2 Advantages of GIS

There are many advantages to using GIS, if the financial resources, technology and expertise are available to establish and maintain the system. The advantages include:

- ◆ efficiency;
- ◆ versatility; and
- ◆ ease of analysis.

In addition, the GIS can be designed in a practical manner. In particular, the availability and quality of information, and the specific needs of the users, can determine the GIS hardware and software needs.

Efficiency

The most time consuming aspect of using GIS lies in transferring the paper maps of the study area into digital format. This process is called digitizing and it takes every feature from the map (i.e., roads, rivers, buildings etc.,) and creates that same image on the computer. Once that “base” information is entered into the computer, then other information can be placed on top of it. Since the Waterfront Regeneration Trust already had a set of digitized Ontario Base Maps (OBM) of the study area, produced by the Ministry of Natural Resources and/or Ontario Hydro, the use of GIS for the HLUI was time efficient.

As mentioned in Chapter 2, the historical land use information was sketched on to the paper OBM. From there, the information was digitized into the computer. The data were entered into the computer in layers, meaning that all of one type of information, for example active landfill sites, was stored as one file. Since there are 12 types of data used in this inventory, there are 12 different layers of information stored in the computer. That spatial information was then linked to the descriptive information.

For example, in an active landfill layer using GIS, each individual landfill has a corresponding table with information concerning that landfill site. This information, ranging from the county in which the landfill site is located to the potential

health and environmental impacts associated with the site, is called attribute data.

This method is time efficient because once all of the information is entered into the computer, any data retrieval for specific areas or types of potential contaminating activities can be accomplished quickly. As well, GIS has the ability to search, alter or add more information to what already exists.

Versatility

An important advantage of using GIS for this inventory lies in its versatility, both graphically and at the database level. As mentioned earlier, the historical information was sketched onto a series of 1:10,000 OBMs. The area of study covers a large geographic region but the capability of GIS allows for the display of any area in the study at various levels of scale. This becomes very useful for focusing on specific areas along the Waterfront. In addition, GIS allows the user to display all of the historical information on the map or only selected layers depending on the issue or question being considered.

An HLUI should be treated as a “living document”, meaning that it should be updated and maintained whenever more historical information is found and/or when the status of properties change. A GIS is the ideal tool to use for this project due to the ease in which updating and maintaining the database can be accomplished.

Ease of Analysis

A valuable feature of a GIS is the use of overlay. Overlay allows for the various layers of information to be displayed together to create areas on the map where the likelihood of potential contamination could be the greatest. For example, there could exist in an industrial zoned area, a closed landfill site and a lakefill site within a small distance of each other, suggesting that this area may have a high potential for soil and groundwater impacts.

The use of overlay acts as a decision-making tool. The graphic display of various current and historical land uses on one map illustrates where one or more potentially contaminating activities were located. Municipalities can use this display as a means of deciding whether or not a soil and groundwater analysis and management plan should be initiated. The graphic ability of the GIS enables the user to make such informed decisions and the database provides any necessary information concerning the activity. GIS can also be used to store, analyze, and display environmental monitoring information, and to show where remediation has taken place.

CHAPTER

4



Information Sources

This section lists the primary sources that were used for this inventory. A synopsis describes the information that was available, and comments on the usefulness of each source.

4.1 PCB Storage Sites

The Ontario Inventory of PCB Storage Sites (July 1993). Ministry of Environment and Energy.

This government inventory lists all of the PCB storage sites for the province of Ontario. There are a large number of PCB storage sites within the study area. Because of time limitations, only the major storage sites were listed and mapped. A major PCB storage site contains liquid PCB waste in quantities greater than or equal to 1,000 kg. PCB information consists of company name, site number, site address, Ministry of Environment Region, county, municipality, and indication of whether or not it is a major or minor site.

Usefulness

This is a complete documentation of all Provincial PCB sites in Ontario. Although the sites are listed with their street addresses, they lose some of their accuracy when transferred onto the map. The OBMs used present good detail of the street network of the areas of study, however, they are not quite detailed enough to pin-point a specific street address. The specific address is still available through the database.

4.2 Waste Disposal Sites

The Waste Disposal Site Inventory (June 1991). Ministry of Environment and Energy.

This document contains an updated list of all of the active and closed waste disposal sites in the province as of October 1990. It also includes a list of closed municipal coal gasification plant sites and industries producing and using coal tar and related tars.

4.2.1 Active and Closed Waste Disposal Sites

In the active waste disposal site section of the inventory the following information is provided: county, city, UTM zone, UTM eastings and northings, status of the site, and the classification of the site. The status of the site refers to whether or not the site is currently receiving waste. If the site is active and is receiving waste, then it is given a number "1". Conversely, a number "3" means that the site is approved to receive waste but is not receiving any at this time. The classification category indicates the potential health and/or environmental impact of the site.

The type of landfill and site location determine the classification of a site:

- ◆ Class A sites are those deemed to have the potential to impact human health.
- ◆ Class B sites are deemed to have the potential to impact mainly the environment.

The closed landfill sites possess the same information but instead of status of the site category, the closure date of the disposal site is included.

Usefulness

The list of both closed and active disposal sites is accompanied by UTM coordinates which are helpful for GIS mapping purposes. The status and classification of the sites provide some detail regarding both the environmental and health concerns at each site.

4.2.2 Municipal Coal Gasification Plant Sites and Industries Producing and Using Coal Tar and Related Tars

This information source outlines the site name, location and years of operation for both the coal gasification plants and the coal tar industries. Accompanying the inventory is a map illustrating the historic locations of the facilities.

Usefulness

The years of operation and the street addresses of both the coal gasification plants and coal tar industries provided useful pieces of information for the inventory. The years of operation provide information on the length of time these activities were in operation, indicating that other land uses may have evolved after their closure. As well, the site classification, which is presented in the same format as the waste disposal site classification section in the inventory, is important in determining the potential of health and/or environmental impacts at each location.

4.3 Areas of Lakefill

Environment And Health Issues on the Toronto Waterfront. (1989). Royal Commission on the Future of the Toronto Waterfront Environment and Health Work Group.

Lake Ontario Shoreline Management Plan. (December 1990). Sandwell Swan Wooster INC., Beak Consultants Limited and EDA Collaborative.

These two sources provide information concerning lakefilling along the north shore of Lake Ontario from Etobicoke east to Trenton. *Environment and Health: Issues on the Toronto Waterfront* deals with the Metro Toronto shoreline only. The *Lake Ontario Shoreline Management Plan* deals with the area east of Metro Toronto to Trenton. The areas west of Etobicoke were

identified through conversations with personnel from the various conservation authorities.

Usefulness

The location of former lakefill sites is valuable information since most of the lakefilling that has occurred in the past has used scrap construction materials, municipal waste and other materials that have the possibility of being contaminated. However, up until recently most municipalities did not store any historical records on where lakefill has occurred. Therefore, conservation authorities and municipalities have to estimate the extent and location of lakefill along their waterfront.

4.4 Areas of Concern

Remedial Action Plans for Areas of Concern. International Joint Commission, United States and Canada.

The International Joint Commission (IJC) is a binational, Canada/United States organization established to resolve problems along their common water border. The IJC has identified Areas of Concern within the Great Lakes. These generally include the major municipal and industrial centres on the Great Lakes rivers, harbours and connecting channels. Each Area of Concern is required to develop a remedial action plan (RAP) to restore beneficial uses to the area. This source indicates the locations of the two Areas of Concern found along the north shore of Lake Ontario between Burlington and Trenton.

Usefulness

The two harbour locations in the study area that are Areas of Concern, Toronto and Port Hope, are identified and labeled on the HLU map. The Bay of Quinte remedial action area

includes Trenton. Hamilton Harbour, although slightly west of the study area for this project, is also identified as an Area of Concern.

4.5 Lead Reduction Zones

Role of Municipal Government in Site Remediation: City of Toronto as a Case Study. (November 1991). Monica Campbell.

Environmental Protection Office, Department of Public Health, City of Toronto.

This report deals with the redevelopment of contaminated lands in the City of Toronto and related health concerns. Of prime concern to this report are areas of soil contamination and remediation for redevelopment purposes.

Usefulness

This document includes a map of the lead reduction zones in Toronto based on information provided by the Ministry of Environment and Energy, which was used in the LOGS HLUI.

4.6 Historical Land Use

Fire Insurance Plans:

- ◆ Trenton (1949)
- ◆ Cobourg (1946)
- ◆ Port Hope (1955)
- ◆ Oshawa (1960)
- ◆ Whitby (1934)
- ◆ Ajax (1960)

◆ Oakville (1967)

◆ Burlington (1971)

These fire insurance plans are presented as maps of a community, usually drawn at a scale of 1:50. They are very detailed maps of buildings; their type, height, and occupancy.

Usefulness

Fire insurance plans make it very easy to identify historic land uses that may have impacted soil and groundwater quality. Some municipalities in the study area are not represented because they either did not save their plans, did not have any created or their plans are being stored within the municipality's archives and are difficult to gain access. The historical information could not be presented for the same date across the waterfront, since municipalities created their insurance plans in different years.

4.7 Current Industrial Land Use

The most recent Official Plans for all of the municipalities and townships within the study area were used to map current land use. The land use categories that were mapped for LOGS include:

- ◆ industrial,
- ◆ urban,
- ◆ estate/rural residential,
- ◆ hamlet,
- ◆ open space,
- ◆ utility,

- ◆ resource extraction and,
- ◆ agricultural.

For the HLUI, the areas identified as industrial were selected from the larger LOGS land use inventory.

Usefulness

Each municipality produces its own Official Plan, therefore the style and terminology is not consistent between Plans. The definition of an industrial area differs slightly from municipality to municipality. For example, the Town of Whitby divides its industrial land uses into four different categories, whereas the City of Trenton uses only one industrial category. However, these plans are the quickest and easiest way to identify areas of current and sometimes past industrial land use. The purpose of mapping the industrial zones is to provide a starting point for identifying lands where site assessments may be needed as part of redevelopment proposals.

4.8 Other Sources

There are a number of other sources that would be useful for an HLUI, but due to time constraints they could not be fully pursued in this study:

Manifest Hazardous Waste Carriers and Receivers Database – Ministry of Environment and Energy, Environmental Monitoring and Reporting Branch, Data Management Unit;

Gas Station Locations – Ministry of Consumer and Commercial Relations, Fuels and Safety Branch;

Federal PCB Storage Sites – Environment Canada;

Fire Insurance Plans for:

- ◆ Brighton
- ◆ Colborne
- ◆ Pickering
- ◆ Scarborough
- ◆ Toronto
- ◆ Etobicoke
- ◆ Mississauga; and

Previous Official Plans – Past official plans for municipalities will provide information concerning industrial areas and the extent to which they have changed over the years.

CHAPTER

5



Conclusions



5.1 An Example

Figure 1 displays the information in the LOGS HLUI using the Whitby-Oshawa landscape unit as an example. Similar information is available from the Waterfront Regeneration Trust for other landscape units, although the data are most complete at the present time for the Whitby-Oshawa unit. Information on data layers can be obtained by contacting Irene Rota at the Trust offices (416) 314-9490. All information in the HLUI should be verified for accuracy and completeness prior to use.

The information displayed in Figure 1 includes:

- ◆ current industrial land use;
- ◆ areas of lakefill;
- ◆ closed landfill sites;
- ◆ licensed PCB storage sites; and
- ◆ historical industrial land use.

Other information presented on the map shows important features to consider alongside the historical and current land use, including;

- ◆ natural areas;
- ◆ landscape unit boundary; and
- ◆ the Waterfront Trail.

The areas identified as potential locations of environmental impact in this landscape unit are the areas where more detailed site assessments should be undertaken prior to redevelopment. The HLUI can assist in designing site assessments at specific properties to ensure that any health and safety issues are identified and addressed early in the land use planning process.

A map such as Figure 1 can also assist to identify locations where more detailed archival and/or field data are needed to complete and verify the inventory. For the Whitby-Oshawa landscape unit this would include review of past official plans, historical maps and photographs, and building permit records.

5.2 Next Steps

This *Preliminary Historical Land Use Inventory for the Lake Ontario Greenway* has provided an overview of some areas where there may be potential for site contamination along the north shore of Lake Ontario. Prior to site specific use by a municipality or landowner, several additional steps should be taken.

i) Match Needs and HLUI Design

The first step for municipalities is to decide what type of inventory is appropriate, the level of detail, and the presentation method that best meets their needs. The LOGS HLUI demonstrates the use of GIS as a tool to present a large amount of historical and current information in a readily accessible format. Helpful explanation on the format and other presentation options for historical land use inventories is provided in the *Guide to Creating Historical Land Use Inventories of Potentially Contaminated Sites for Municipalities in Ontario* (the *Guide*), prepared by the Canadian Urban Institute and the Environmental Protection Office of the City of Toronto Department of Health.

ii) Complete Research at the Local Level

The second step is for municipalities to prepare their own HLUI. Taken together with the options and methods described in the *Guide*, the LOGS HLUI can provide a demonstration or a starting point for waterfront municipalities that wish to add more detailed information suited to their own needs.

This second step should include verification of the existing information and further research to complete the inventory. The following sources of additional information should be considered:

Manifest Hazardous Waste Carriers and Receivers Database – Ministry of Environmental and Energy, Environmental Monitoring and Reporting Branch Data Management Unit

Gas Station Locations – Ministry of Consumer and Commercial Relations, Fuels and Safety Branch

Federal PCB Storage Sites – Environment Canada

Past Official Plans – Past official plans for municipalities will provide information about industrial land uses and the extent to which they have changed over the years.

In addition, the preliminary Lake Ontario Greenway HLUI does not include Fire Insurance Plans for the following municipalities:

- ◆ Brighton
- ◆ Colborne
- ◆ Pickering
- ◆ Scarborough
- ◆ Toronto
- ◆ Etobicoke
- ◆ Mississauga

iii) Maintain Inventory

Once the HLUI has been established, ongoing verification and maintenance of the information is needed to ensure that it is complete and reliable. In addition to land use information, it would be helpful to include areas where remediation has been undertaken and/or where environmental monitoring is in progress.

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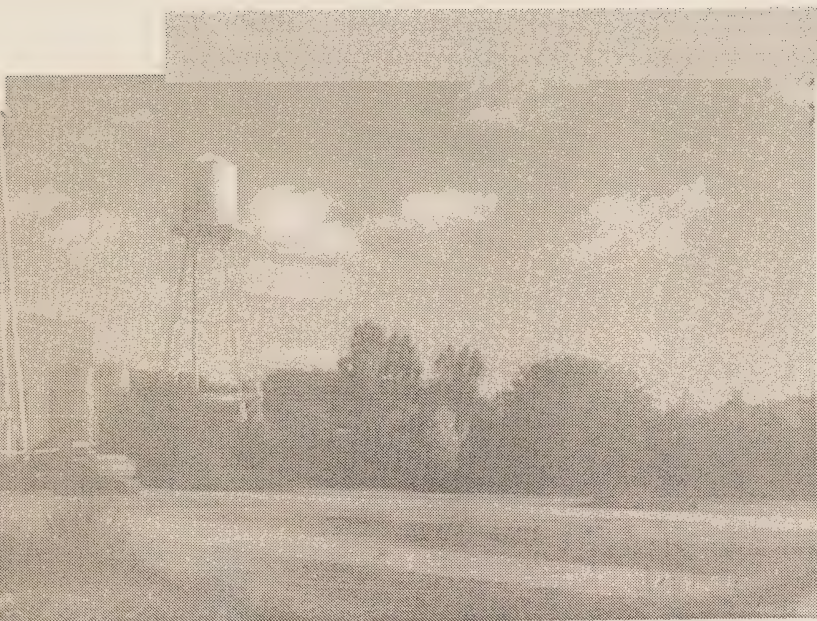
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Appendices

APPENDIX A:
MAJOR PROVINCIAL PCB SITES (MOEE, JULY 1993)

ID	Storage Facility	Address	City
1	Toronto Housing Department	586 Lake Shore Blvd.	Toronto
2	Toronto Hydro	233 Adelaide St. E.	Toronto
3	Canadian General Electric	420 South Service Rd.	Oakville
4	St. Lawrence Starch	141 Lake Shore Rd. E.	Mississauga
5	Westroc Industries	2424 Lake Shore Rd. W.	Mississauga
6	Arrowhead Metals Ltd.	260 Eighth St.	Toronto
7	Aw-Rite Mini Storage	21 Fleeceline Rd.	Etobicoke
8	Breslube (Canam)	115 Unwin Ave.	Toronto
9	Daniels Lakeshore Corporation	3050 Lake Shore Blvd. W.	Etobicoke
10	Dominion Colour Company	199 New Toronto St.	Toronto
11	Federal Pioneer Ltd.	445 Homer Ave.	Toronto
12	Humber Sewage Plant	130 The Queensway	Etobicoke
13	Main Sewage Treatment Plant	Ashbridges Bay	Toronto
14	Olympia and York	77 Adelaide St. W.	Toronto
15	Ontario Jockey Club	1669 Queen St. W.	Toronto
16	St. Lawrence Park	369 Lake Shore Blvd. E.	Toronto
17	Ford Motor Company	The Canadian Dr.	Oakville
18	Oakville Public Utilities	530 Lyons Lane	Oakville
19	Lakeview Generating Station	Hydro Rd.	Mississauga
20	Dufferin Concrete	68 Old Orchard Rd.	Pickering
21	General Motors of Canada	Park Rd. S.	Oshawa
22	Lasco Steel	Hopkins St. S.	Whitby
23	Ontario Hydro Service Yard	Lot 16, Concession 2	Bomanville
24	Darlington Nuclear Power Station		Newcastle
25	Pickering Nuclear Power Station "B"		Pickering
26	Ontario Hydro Maintenance	800 Brock Rd. South	Pickering
27	General Foods	50 William St.	Cobourg
28	Ontario Hydro	Lot 34, Concession 1	Hamilton Twp
29	Eimco Jarvic Clark	4445 Fairview Ave.	Burlington

APPENDIX B:
ACTIVE WASTE DISPOSAL SITES (MOEE, JUNE 1991)

ID	County	City	Zone	Easting	Northing	Status	Class
1	Durham	Pickering	17	655000	4852650	1	A3
2	Durham	Newcastle	17	698800	4870650	3	A2
3	Durham	Newcastle	17	681000	4879500	1	A4
4	Durham	Newcastle	17	681950	4860400	1	A3
5	Durham	Pickering	17	656200	4582950	1	A3
6	Durham	Pickering	17	652800	4858800	1	A3
7	Durham	Ajax	17	654100	4862350	3	A4
8	Durham	Pickering	17	653500	4863550	3	A4
9	Halton	Burlington	17	592450	4797650	3	A3
10	Halton	Oakville	17	602100	4805500	1	A1
11	Halton	Oakville	17	602700	4805200	1	A1
12	Halton	Oakville	17	602900	4805900	1	A1
13	Halton	Oakville	17	601850	4805900	1	A1
14	Northumberland	Port Hope	17	716200	4870600	1	A3
15	Northumberland	Brighton	18	280780	4886050	1	A4
16	Northumberland	Cramahe	18	269125	4875125	1	B4
17	Northumberland	Cramahe	18	269125	4875125	1	A4
18	Northumberland	Haldimand	17	734400	4875260	1	A4
19	Northumberland	Haldimand	17	737830	4875965	1	A2
20	Northumberland	Hamilton	17	729850	4876500	3	A2
21	Northumberland	Hope	17	715050	4871810	1	A3
22	Northumberland	Hope	17	708029	4866041	1	B4
23	Peel	Mississauga	17	612150	4817500	1	A1
24	Peel	Mississauga	17	611150	4817240	1	A1
25	Peel	Mississauga	17	605510	4828040	1	A3
26	Peel	Mississauga	17	610750	4825170	1	A3
27	Toronto	Scarborough	17	647750	4854000	3	A3
28	Toronto	Scarborough	17	649440	4847750	1	A3

APPENDIX C:
CLOSED WASTE DISPOSAL SITES (MOEE, JUNE 1991)

ID	County	City	Zone	Easting	Northing	Date	Class
1	Durham	Oshawa	17	669810	4875450	1980	A4
2	Durham	Oshawa	17	673500	4866525	1979	A4
3	Durham	Oshawa	17	670220	4867210	1979	A6
4	Durham	Newcastle	17	688640	4874210	1983	A3
5	Durham	Newcastle	17	688800	4873175	1975	A6
6	Durham	Newcastle	17	696650	4869175	1972	A6
7	Durham	Newcastle	17	698025	4867550	1976	A5
8	Durham	Newcastle	17	681275	4866850	1975	A6
9	Durham	Newcastle	17	684600	4865260	1975	A6
10	Durham	Newcastle	17	682190	4862850	1972	NP
11	Durham	Newcastle	17	685100	4864900	1982	A3
12	Durham	Pickering	17	652940	4859400	1972	B7
13	Durham	Whitby	17	662920	4867770	1979	B6
14	Durham	Whitby	17	665570	4857600	1983	A3
15	Durham	Ajax	17	657650	4854900	1971	A5
16	Durham	Ajax	17	660125	4854500	1940	A5
17	Durham	Ajax	17	654700	4862900	1971	A5
18	Durham	Whitby	17	663750	4868450	1976	A4
19	Durham	Whitby	17	663625	4860350	N/A	A3
20	Durham	Whitby	17	667100	4859400	1968	A5
21	Durham	Whitby	17	666375	4857575	N/A	A3
22	Durham	Newcastle	17	688600	4873650	1970	A5
23	Durham	Newcastle	17	695550	4871800	1972	A5
24	Durham	Newcastle	17	684400	4865750	1974	A4
25	Durham	Newcastle	17	687100	4862550	N/A	A3
26	Durham	Oshawa	17	674300	4858600	1950	A5
27	Durham	Oshawa	17	674050	4859350	1950	A5
28	Durham	Oshawa	17	673050	4859350	1937	A5
29	Durham	Oshawa	17	673750	4860475	1940	A5
30	Durham	Oshawa	17	673350	4861200	1940	A5
31	Durham	Oshawa	17	672350	4862750	1940	A5
32	Durham	Oshawa	17	671400	4861500	1921	A5
33	Durham	Oshawa	17	671900	4860750	1940	A5
34	Durham	Oshawa	17	672350	4862750	1960	A5
35	Durham	Oshawa	17	672350	4862750	1950	A5

ID	County	City	Zone	Easting	Northing	Date	Class
36	Durham	Oshawa	17	672350	4862750	1940	A5
37	Durham	Oshawa	17	672600	4863480	1940	A5
38	Durham	Oshawa	17	672600	4863640	1940	A5
39	Durham	Oshawa	17	672350	4862750	N/A	A3
40	Durham	Pickering	17	654100	4862400	N/A	A3
41	Durham	Pickering	17	652800	4858800	N/A	A3
42	Durham	Pickering	17	653500	4863600	N/A	A3
43	Halton	Burlington	17	599680	4805670	1974	A1
44	Halton	Oakville	17	600250	4831750	1982	A3
45	Halton	Oakville	17	593500	4813010	1974	NP
46	Halton	Oakville	17	602250	4804380	1983	NP
47	Halton	Oakville	17	603820	4807540	1974	NP
48	Halton	Oakville	17	600500	4813710	1974	A4
49	Halton	Oakville	17	600250	4813750	1960	A5
50	Halton	Oakville	17	606000	4817050	1960	A5
51	Halton	Oakville	17	607275	4810875	1958	A5
52	Halton	Oakville	17	607275	4810875	1955	A5
53	Halton	Oakville	17	607275	4810875	1957	A5
54	Halton	Oakville	17	607275	4810875	1970	A5
55	Halton	Oakville	17	604125	4805075	1950	A5
56	Halton	Oakville	17	603800	4807900	N/A	A3
57	Halton	Burlington	17	592775	4798275	1972	A4
58	Halton	Burlington	17	594350	4798800	1957	A5
59	Northumberland	Cobourg	17	726120	4871550	1975	A1
60	Northumberland	Port Hope	17	714875	4871950	1973	A5
61	Northumberland	Brighton	18	279900	4877300	1975	A2
62	Northumberland	Brighton	18	277650	4887730	1977	B4
63	Northumberland	Brighton	18	285880	4880700	1975	B4
64	Northumberland	Cramahe	18	270190	4890725	1974	B4
65	Northumberland	Cramahe	18	265100	4887080	1974	B4
66	Northumberland	Haldimand	18	263750	4881590	1976	A2
67	Northumberland	Haldimand	17	736400	4887150	1975	B4
68	Northumberland	Hope	17	709020	4873490	1976	A4
69	Northumberland	Hope	17	715840	4872920	1973	NP
70	Northumberland	Hope	17	713240	4871540	1973	A7
71	Northumberland	Hope	17	707100	4871050	1979	A7
72	Northumberland	Port Hope	17	717375	4869200	1930	A5

ID	County	City	Zone	Easting	Northing	Date	Class
73	Northumberland	Port Hope	17	717200	4869950	1940	A5
74	Northumberland	Port Hope	17	717100	4870075	N/A	A3
75	Northumberland	Cobourg	17	726500	4870600	1940	A5
76	Northumberland	Cobourg	17	726375	4874975	1960	A5
77	Northumberland	Cobourg	17	728075	4870900	1920	A5
78	Peel	Mississauga	17	611100	4817300	1980	A1
79	Peel	Mississauga	17	608560	4830450	1982	A3
80	Peel	Mississauga	17	610190	4819275	1975	A5
81	Peel	Mississauga	17	613260	4822475	1980	A1
82	Peel	Mississauga	17	613260	4822475	1982	A1
83	Peel	Mississauga	17	614250	4829450	N/A	A3
84	Peel	Mississauga	17	614575	4829200	N/A	A3
85	Peel	Mississauga	17	616050	4824875	N/A	A3
86	Peel	Mississauga	17	614025	4822875	1960	A5
87	Peel	Mississauga	17	614250	4822275	N/A	A3
88	Peel	Mississauga	17	609900	4820950	1973	A5
89	Peel	Mississauga	17	608675	4822275	1962	A5
90	Peel	Mississauga	17	609650	4840250	N/A	A3
91	Peel	Mississauga	17	6035000	4826475	1957	A5
92	Toronto	Etobicoke	17	619620	4829300	N/A	A1
93	Toronto	Toronto	17	634600	4831450	1982	A3
94	Toronto	Etobicoke	17	612310	4839100	1977	A3
95	Toronto	Etobicoke	17	622260	4831130	1979	A1
96	Toronto	Scarborough	17	646700	4852500	1967	A5
97	Toronto	Scarborough	17	644450	4847500	1954	A5
98	Toronto	Scarborough	17	638400	4844925	1950	A5
99	Toronto	Scarborough	17	640900	4844600	1959	A5
100	Toronto	Scarborough	17	638500	4842525	1955	A5
101	Toronto	Scarborough	17	637025	4841650	1953	A5
102	Toronto	Scarborough	17	638700	4840500	N/A	A3
103	Toronto	Scarborough	17	638100	4839850	1969	A5
104	Toronto	Scarborough	17	638800	4839850	1962	A5
105	Toronto	Scarborough	17	638350	4838850	N/A	A3
106	Toronto	Scarborough	17	638150	4838500	1954	A5
107	Toronto	Scarborough	17	638250	4838100	N/A	A3
108	Toronto	Scarborough	17	638550	4837850	N/A	A3

ID	County	City	Zone	Easting	Northing	Date	Class
109	Toronto	Scarborough	17	647625	4850150	1975	A4
110	Toronto	Etobicoke	17	617600	4826550	1957	A5
111	Toronto	Etobicoke	17	615800	4830650	1954	A5
112	Toronto	Etobicoke	17	621525	4833050	1965	A5
113	Toronto	Etobicoke	17	621550	4833600	1965	A5
114	Toronto	Etobicoke	17	613600	4834050	1967	A5
115	Toronto	Etobicoke	17	620150	4837050	1955	A5
116	Toronto	Etobicoke	17	620300	4837300	1965	A5
117	Toronto	Etobicoke	17	612650	4839200	1967	A5
118	Toronto	Etobicoke	17	622600	4837225	1960	A5
119	Toronto	Toronto	17	632500	4836425	1962	A5
120	Toronto	Scarborough	17	643300	4842500	1960	A5
121	Toronto	Scarborough	17	642650	4841725	N/A	A5
122	Toronto	Scarborough	17	641625	4841925	1961	A5
123	Toronto	Scarborough	17	642100	4840700	N/A	A5
124	Toronto	Scarborough	17	640400	4840075	1954	A5
125	Toronto	Scarborough	17	639875	4841700	1955	A5
126	Toronto	Scarborough	17	639150	4841975	1955	A5
127	Toronto	Scarborough	17	643850	4849150	1958	A5
128	Toronto	Scarborough	17	641700	4844700	1960	A5
129	Toronto	Scarborough	17	645400	4850500	1967	A5
130	Toronto	Scarborough	17	644900	4850400	1962	A5

APPENDIX D:
GASIFICATION PLANTS (MOEE, 1991)

ID	Address	City	Years	Eastings	Northings
1	271 Front St.	Toronto	1841-1954	631870	4834200
2	415 Eastern Ave.	Toronto	1909-1954	633660	4834990
3	28 Bathurst St.	Toronto	1909-1954	628900	4833000
4	70-80 John St.	Port Hope	1859-1938	717000	4869460
5	Queen and Charles Sts.	Cobourg	1857-1938	727520	4871000

APPENDIX E:
INDUSTRIAL SITES PRODUCING AND
USING COAL TAR AND RELATED TARs (MOEE, 1991)

ID	Type	Company	Address	City	Years	SIC
1	Coal Tar Plant	Barrett Co.	675 Lake Shore Blvd. E.	Toronto	1922-1960	399
2	Coal Tar Plant	Dominion Tar & Chemical, Domtar Chemicals	801 Lake Shore Blvd. E.	Toronto	1925-1974	371
3	Coal Tar Plant	Imperial Varnish and Colour	north side Lake Shore Blvd. btwn Logan and Morse Sts.	Toronto	1900-1960	375
4	Roofing Felt and Tarred Paper Products	Paterson Manufacturing Co.	297-307 Front St. E.	Toronto	1882-1899	399
5	Industrial Gas Plant	Pintisch Compressing Co.	foot of Peter St. east of Spadina	Toronto	1906-1960	304

APPENDIX F:
INTERNATIONAL JOINT COMMISSION AREAS OF CONCERN
BETWEEN BURLINGTON AND TRENTON (IJC, 1991)

ID	Area of Concern
1	Port Hope Harbour
2	Toronto Harbour

APPENDIX G: FIRE INSURANCE PLANS

ID	Date	City	Site	SIC	Comments
1	1955	Port Hope	CNR Station	453	Passenger and freight
2	1955	Port Hope	Armories	801	N/A
3	1955	Port Hope	Pumphouse	N/A	N/A
4	1955	Port Hope	Eldorado Mining & Refining	299	Uranium products
5	1955	Port Hope	Coal Storage	369	N/A
6	1955	Port Hope	Mathews Conveyor Ltd.	339	Fueled by coal
7	1955	Port Hope	Agricultural Chemicals Ltd.	372	Fertilizer plant
8	1955	Port Hope	Empire Hanna Coal Co. Ltd.	369	N/A
9	1955	Port Hope	Port Hope Sanitary Mfg. Co.	399	N/A
10	1955	Port Hope	Arbo Leather Storage	170	Fueled by coal
11	1955	Port Hope	CPR Station	453	N/A
12	1955	Port Hope	B. Elliot Canada Ltd.	319	Mfg. heavy machinery
13	1955	Port Hope	Brunner Corporation Ltd.	301	Mfg. boilers
14	1955	Port Hope	Cosmos Chemical Co.	375	Mfg. lacquers
15	1955	Port Hope	Coal Shed	369	N/A
16	1955	Port Hope	Jackson Brothers Ltd.	358	Cement and lime factory
17	1946	Cobourg	Cobourg Dyeing Co. Ltd.	319	N/A
18	1946	Cobourg	Cooey, H.W. Machine & Arms	308	N/A
19	1946	Cobourg	CPR Station	453	N/A
20	1946	Cobourg	CNR Station	453	N/A
21	1946	Cobourg	Armories	801	N/A
22	1946	Cobourg	Shell Oil Co. Ltd.	361	Tanks of gasoline
23	1946	Cobourg	Ferry Docks	N/A	N/A
24	1946	Cobourg	Sunoco Oil	361	Tanks of gasoline
25	1946	Cobourg	Imperial Oil Ltd.	361	Gas, kerosene, oil, diesel
26	1946	Cobourg	Jex & Co.	N/A	Attached coal shed
27	1946	Cobourg	Coal Yard	479	N/A
28	1946	Cobourg	Coal Shed	479	N/A
29	1946	Cobourg	Coal Shed	479	N/A
30	1946	Cobourg	Coal Shed	479	N/A
31	1946	Cobourg	The Bird-Archer Co.	301	Mfg. boiler compounds

ID	Date	City	Site	SIC	Comments
32	1946	Cobourg	CNR Freight Shed	479	N/A
33	1946	Cobourg	Cobourg Utilities	N/A	N/A
34	1946	Cobourg	Junk Yard	N/A	N/A
35	1946	Cobourg	Cobourg Pumping Station	N/A	N/A
36	1966	Oshawa	General Motors of Canada	323	Mfg. cars
37	1966	Oshawa	Water Purification Plant	N/A	N/A
38	1966	Oshawa	Exp. Steel Frames Co.	302	N/A
39	1966	Oshawa	Houdaille Industries	325	Mfg. bumpers
40	1966	Oshawa	D.X. Fuels	361	Tanks of gas
41	1966	Oshawa	Lander-Stark Oil Ltd.	361	N/A
42	1966	Oshawa	Murphy Oil Co. Ltd.	361	N/A
43	1934	Whitby	Martin Mfg. Co. Ltd.	306	Saddlery and hardware
44	1934	Whitby	King Bros. Co. Ltd.	170	Tannery
45	1934	Whitby	Pumping Station	N/A	N/A
46	1960	Ajax	Federal Filtration Plant	N/A	N/A
47	1960	Ajax	Stark Electronic Instruments	339	N/A
48	1960	Ajax	Geo W. Endress Co. Ltd.	399	N/A
49	1960	Ajax	William A. Parish Water Purification	N/A	N/A
50	1960	Ajax	Water Filtration Plant	N/A	N/A
51	1971	Burlington	Achem Ltd.	379	Chemicals
52	1971	Burlington	Barton Tubes	150	N/A
53	1971	Burlington	Capo Polishes	375	N/A
54	1971	Burlington	F.W. Fearman Co. Ltd.	101	Meat packers
55	1971	Burlington	General Smelting Co. Ltd.	294	N/A
56	1971	Burlington	I.B.L. Industries Ltd. Plant	296	Welding and dye
57	1971	Burlington	National Woodworking Ltd.	399	Woodworking
58	1971	Burlington	Niagara Chemicals	371	N/A
59	1971	Burlington	Parker-Hannifin Ltd.	308	Machine Shop
60	1971	Burlington	Tip-Top Canners Ltd.	521	Canning
61	1971	Burlington	CNR & CPR Freight Shed	479	N/A
62	1967	Oakville	Area Marine Industries Ltd.	328	Boat building
63	1967	Oakville	British Paints Ltd.	375	N/A
64	1967	Oakville	Canada Freeze Dry Foods Ltd.	521	N/A
65	1967	Oakville	Canadian General Electric	337	N/A
66	1967	Oakville	Crampian Marine Ltd.	328	Boat building

ID	Date	City	Site	SIC	Comments
67	1967	Oakville	Duplate Canada Ltd.	399	Fuel oil tanks
68	1967	Oakville	Ferro Enamels (Canada)	375	N/A
69	1967	Oakville	King & Paving & Material Ltd.	369	N/A
70	1967	Oakville	Lakeshore Dye Casting Ltd.	269	N/A
71	1967	Oakville	Maine Maritime Express Ltd.	324	Truck repairs
72	1967	Oakville	Roux Laboratories Ltd.	563	Hair colourings
73	1967	Oakville	Sterling Faucet Canada Ltd.	424	Plumbing supplies
74	1967	Oakville	Stor-Aid of Canada Ltd.	399	Mfg. foam cushions
75	1967	Oakville	Torrington Mfg. of Canada Ltd.	337	Mfg. blowers and fans
76	1967	Oakville	United Gas	361	N/A
77	1967	Oakville	Water Works Pumping Station	N/A	N/A
78	1967	Oakville	Westreel Rosco Ltd.	301	Gas fired heating units
79	1967	Oakville	Witco Chemical Co. Canada Ltd.	371	N/A
80	1967	Oakville	Oakville Wood Specialties Ltd.	563	N/A
81	1949	Trenton	Trenton Dyeing & Finishing Co.	296	Dyeing plant
82	1949	Trenton	CNR Turn Table	453	N/A
83	1949	Trenton	Stokely Van Camp of Canada	521	Canning plant

APPENDIX H:
TRANSPORTATION NODES

ID	Type	City	Name
1	Railway	Trenton	
2	Harbour	Trenton	Weller's Bay
3	Harbour	Brighton	
4	Harbour	Cobourg	Cobourg Harbour
5	Railway	Cobourg	
6	Railway	Port Hope	
7	Harbour	Port Hope	Port Hope Harbour
8	Harbour	Oshawa	Oshawa Harbour
9	Railway	Whitby	
10	Harbour	Whitby	Whitby Harbour
11	Harbour	Pickering	Frenchman's Bay
12	Harbour	Toronto	Toronto Harbour
13	Railway	Toronto	Rail Lands
14	Railway	Etobicoke	
15	Harbour	Port Credit	Port Credit Harbour
16	Railway	Oakville	
17	Harbour	Oakville	Bronte Harbour
18	Airport	Toronto	Toronto Airport
19	Harbour	Clarington	Port Darlington

APPENDIX I:
EXAMPLES OF INDUSTRIES IN THE LAKE ONTARIO GREENWAY

ID	Name	Address	City	Date Est.	SIC
1	St. Lawrence Cement	2391 Lakeshore Rd. W.	Mississauga	1954	354
2	Petro-Canada Product	385 Southdown Rd.	Mississauga	1943	361
3	Canada Metal Co.	721 Eastern Ave.	Toronto	1906	309
4	Toronto Refiners & Smelting	28 Bathurst St.	Toronto	N/A	294
5	Snow Removal Pile	Unwin Ave.	Toronto	N/A	N/A
6	Imperial Oil Site	Lakeshore Rd. W.	Mississauga	N/A	361
7	Water Treatment Plant	B.F., Lot 28	Clarington	N/A	N/A
8	St. Mary's Cement	N/A	Clarington	N/A	354
9	Quarry	B.F., Lot 14	Clarington	N/A	N/A
10	Water Pump House	N/A	Oshawa	N/A	N/A

APPENDIX J: STANDARD INDUSTRIAL CLASSIFICATION CODES

List of Activities From EPO Database (Campbell, 1991)

No.	SIC	Industry
1.	06	Mining
2.	071	Crude Petroleum & Natural Gas
3.	101	Meat & Poultry Products
4.	108	Sugar & Sugar Confectionery
5.	15	Rubber Products
6.	16	Plastic Products
7.	17	Leather & Allied Products
8.	19	Textile Products
9.	2495	Fur Goods
10.	25	Wood
11.	27	Paper & Allied Products
12.	28	Printing & Publishing
13.	29	Primary Metal
14.	294	Iron Foundries
15.	296	Aluminum Rolling, Casting & Extruding
16.	297	Copper & Copper Alloy Rolling & Casting
17.	299	Other Rolled Cast & Extruded Non-Ferrous Metal Products
18.	30	Fabricated Metal Products (Except Machinery & Transportation Equipment)
19.	301	Power Boiler & Heat Exchanger
20.	302	Fabricated Structural Metal Products
21.	303	Ornamental & Architectural Metal Products
22.	304	Stamped, Pressed & Coated Metal Products
23.	305	Wire & Wired Products
24.	306	Hardware, Tool & Cutlery
25.	307	Heating Equipment
26.	308	Machine Shop
27.	309	Other Metal Fabricating
28.	31	Machinery (Except Electrical Machinery)
29.	311	Agricultural Implements

No.	SIC	Industry
30.	312	Commercial Refrigeration & Air Conditioning
31.	319	Other Machinery & Equipment
32.	32	Transportation Equipment
33.	321	Aircraft & Aircraft Parts
34.	323	Motor Vehicle
35.	324	Truck & Bus Body & Trailer
36.	325	Motor Vehicle Parts & Accessories
37.	327	Shipbuilding & Repair
38.	328	Boat building & Repair
39.	33	Electrical & Electronics
40.	332	Major Appliance (Electric & Non-Electric)
41.	333	Electric Lighting
42.	334	Record Player, Radio & Television Receiver
43.	337	Electrical Industrial Equipment
44.	338	Communications & Energy Wire & Cable
45.	339	Other Electrical Products
46.	3391	Battery Industry
47.	35	Non-Metallic Mineral Products
48.	351	Clay Products
49.	354	Concrete Products
50.	355	Glass & Glass Products
51.	357	Abrasives Industry
52.	358	Lime Industry
53.	36	Refined Petroleum & Coal Products
54.	361	Refined Petroleum Products
55.	369	Other Petroleum & Coal Products
56.	37	Chemical & Chemical Products
57.	371	Industrial Chemicals
58.	372	Agricultural Chemicals
59.	373	Plastic & Synthetic Resin
60.	374	Pharmaceuticals

No.	SIC	Industry
61.	375	Paint & Varnish
62.	376	Soap & Cleaning Compounds
63.	377	Toilet Preparations
64.	379	Other Chemical Products
65.	39	Other Manufacturing Industries
66.	391	Scientific & Professional Equipment
67.	392	Jewelry & Precious Metal
68.	393	Sporting Goods & Toys
69.	397	Sign & Display
70.	399	Other Manufactured Products
71.	40	Building, Developing & General Contracting
72.	412	Highway & Heavy Construction
73.	42	Trade Contracting
74.	422	Structural & Related Work
75.	424	Plumbing, Heating & Air Conditioning
76.	425	Mechanical Specialty Work
77.	427	Interior & Finishing Work
78.	45	Transportation Industries
79.	453	Railway Transport & Related Service
80.	454	Water Transport
81.	456	Truck Transport
82.	457	Public Passenger Transit Systems
83.	458	Other Transportation
84.	459	Other Service Industries Incidental to Transportation
87.	47	Storage & Warehousing
88.	479	Other Storage & Warehousing (other than Grain Elevator Industry)
89.	49	Other Utility Industries
90.	491	Electric Power Systems
91.	492	Gas Distribution Systems

No.	SIC	Industry
92.	51	Petroleum Products, Wholesale
93.	52	Food, Beverage, Drug & Tobacco, Wholesale
94.	521	Food, Wholesale
95.	522	Beverages Wholesale
96.	523	Drugs & Toilet Preparations, Wholesale
97.	54	Household Goods, Wholesale
98.	541	Electrical & Electronic Household Appliances & Parts, Wholesale
99.	55	Motor Vehicle, Parts & Accessories, Wholesale
100.	56	Metals, Hardware, Plumbing, Heating & Building Materials Industries, Wholesale
101.	561	Metal & Metal Products
102.	562	Hardware & Plumbing, Heating & Air Conditioning
103.	563	Lumber & Building Materials, Wholesale
104.	573	Industrial Machinery, Equipment & Supplies
105.	59	Other Products, Wholesale
106.	591	Waste Materials, Wholesale
107.	5911	Automobile Wrecking
108.	5919	Other Waste Materials
109.	592	Paper & Paper Products, Wholesale
110.	593	Agricultural Supplies, Wholesale
111.	595	Photographic Equipment & Musical Instruments & Supplies, Wholesale
112.	596	Jewelry & Watches, Wholesale
113.	597	Industrial & Household Chemicals, Wholesale
114.	599	Other Products, Wholesale
115.	63	Automotive Vehicles, Parts & Accessories, Sales & Service
116.	633	Gasoline Service Stations
117.	635	Motor Vehicle Repair Shops
118.	6351	Garages (General Repairs)
119.	6352	Paint & Body Repair Shops
120.	6353	Muffler Replacement Shops
121.	81	Federal Government Service
122.	811	Defense Services

No.	SIC	Industry
123.	861	Hospitals
124.	972	Laundries & Cleaners
125.	9726	Carpet Cleaning
126.	9792	Fur Cleaning, Repair & Storage
127.	9931	Photographers
128.	9942	Welding
129.	9951	Disinfecting & Exterminating Services

FIGURE 1 HISTORICAL LAND USE
WHITBY-OSHAWA LANDSCAPE UNIT

-  Current Industrial Land Use
-  Lakefill Area
-  Natural Area
-  Waterfront Trail
-  Connecting Trail
-  Landscape Unit Boundary

-  Closed Landfill Site
-  PCB Site
-  Historic Industrial Land Use



Sources:
Base: Ontario Base Mapping Program,
Ministry of Natural Resources

PCB Sites: Ministry of Environment and Energy, 1993
Current Industrial Land Use: City of Oshawa, 1987; Town of Whitby, 1988
Closed Landfill Sites: Ministry of Environment and Energy, 1991
Historic Industrial Land Use: Canadian Underwriters' Association, 1960

September, 1995



The history of urban development along the north shore of Lake Ontario has included a variety of industrial and port-related operations. Some of these operations have resulted in impacts on soil and groundwater quality that must be addressed as redevelopment occurs.

Historical Land Use Inventories (HLUIs) are important tools for municipalities, investors, and others involved in the restoration and redevelopment of industrial properties. They "flag" properties where there could be soil and groundwater concerns. These areas can then be assessed in detail as part of redevelopment projects.

This Preliminary Historical Land Use Inventory for the Lake Ontario Greenway maps areas of lakefill, historical industrial uses, registered PCB storage sites, waste disposal sites, gasification plants, and transportation nodes, as well as natural areas and current industrial areas. The methods used to develop the preliminary HLUI, and the use of geographic information systems as a presentation and analytical tool, are described. The inventory can be used as a demonstration or a starting point for municipalities who wish to establish their own inventory.



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